MARYLAND
Department of Health

Public Health Preparedness and Situational Awareness Report: #2019:07

Reporting for the week ending 02/16/19 (MMWR Week #07)

February 22, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS
National: **No Active Alerts**
Maryland: **Normal (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

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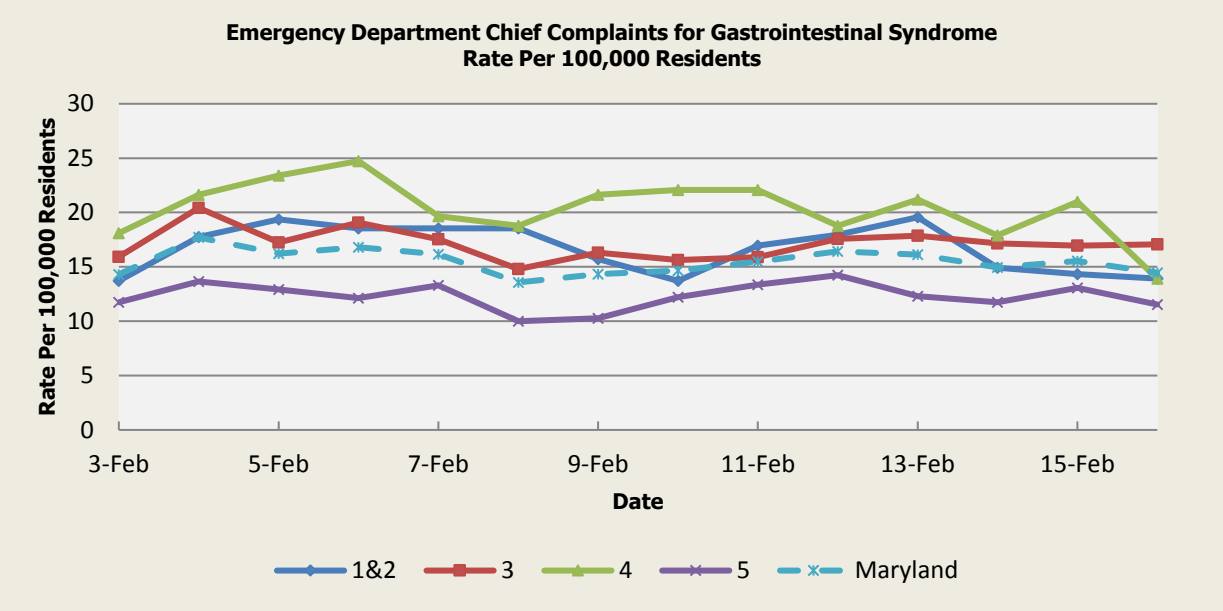
Gastrointestinal Syndrome



There were five (5) Gastrointestinal Syndrome outbreaks reported this week: two (2) outbreaks of Gastroenteritis in Assisted Living Facilities (Region 3); one (1) outbreak of Gastroenteritis in a Community (Region 5); two (2) outbreaks of Gastroenteritis/Foodborne associated with Restaurants (Region 3).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.12	15.05	15.78	10.16	13.07
Median Rate*	13.11	14.83	15.24	10.04	12.95

** Per 100,000 Residents*

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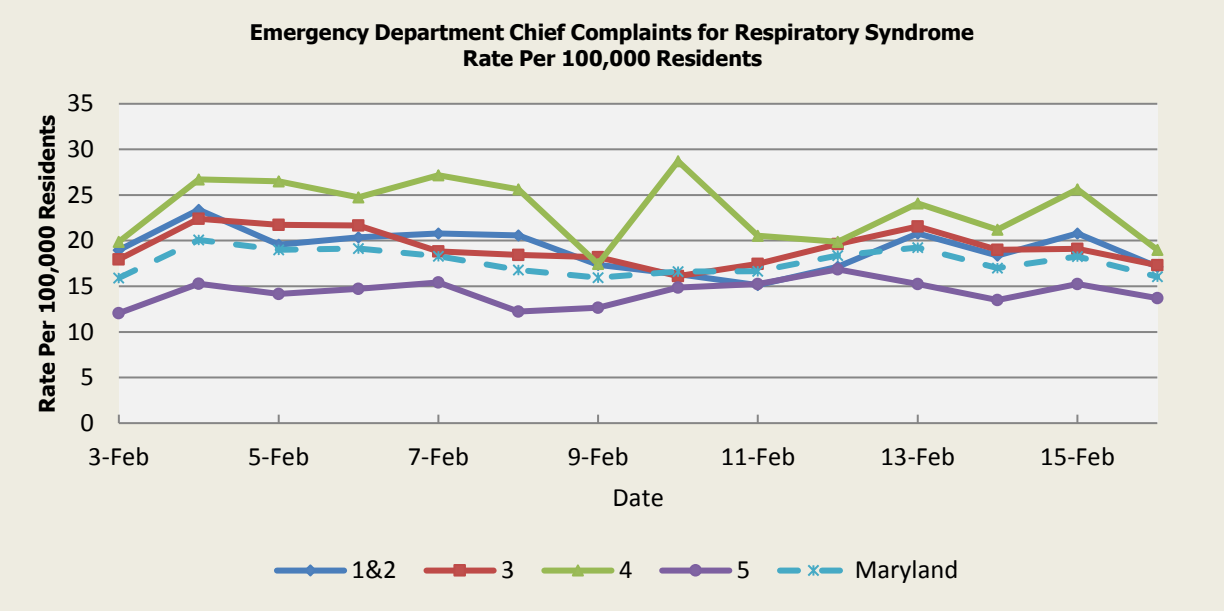
Respiratory Syndrome



There were eight (8) Respiratory Syndrome outbreaks reported this week: three (3) outbreaks of Influenza in Nursing Homes (Regions 3,5); one (1) outbreak of Influenza in a Hospital (Region 3); one (1) outbreak of Influenza associated with a Day and Residential Program (Region 4); one (1) outbreak of Influenza associated with a School (Region 3); two (2) outbreaks of ILI/Pneumonia in Nursing Homes (Regions 3,5).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.54	14.64	14.94	9.93	12.68
Median Rate*	12.10	14.10	14.35	9.56	12.21

** Per 100,000 Residents*

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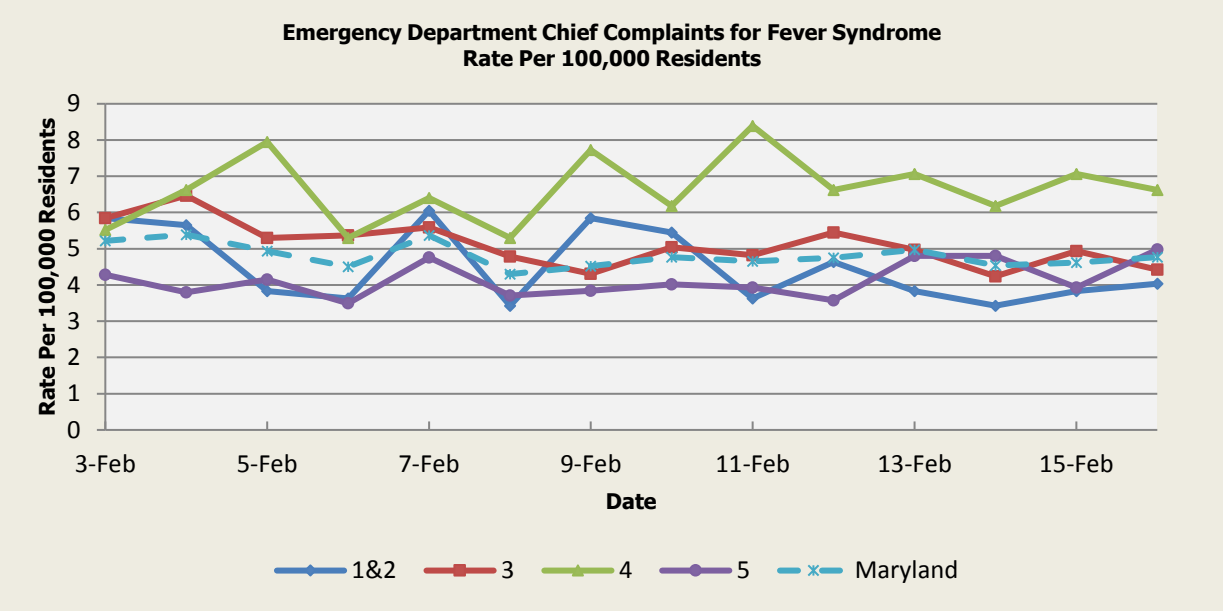
Fever Syndrome



There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.04	3.88	4.05	3.03	3.49
Median Rate*	2.82	3.76	3.97	2.92	3.37

**Per 100,000 Residents*

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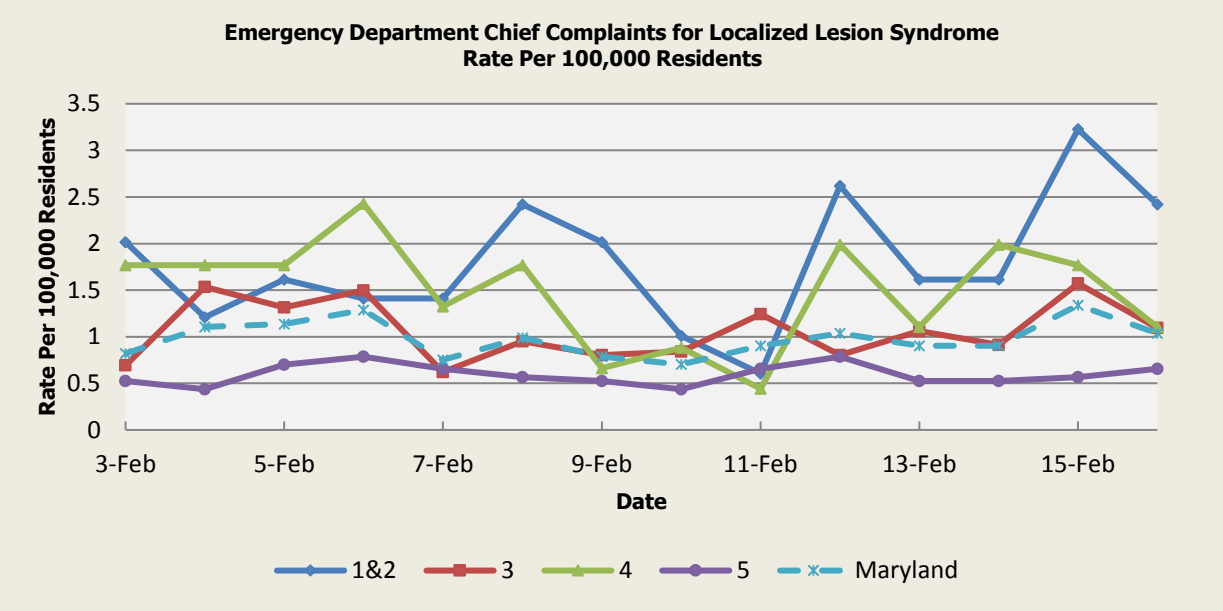
Localized Lesion Syndrome



There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.09	1.81	2.04	0.92	1.43
Median Rate*	1.01	1.75	1.99	0.87	1.37

** Per 100,000 Residents*

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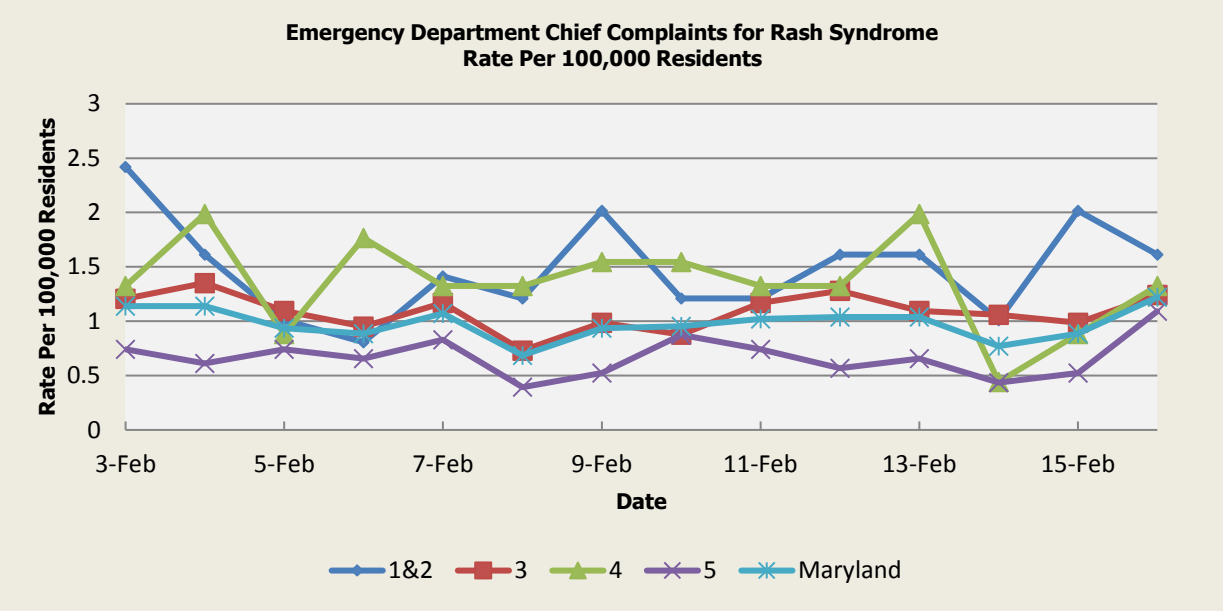
Rash Syndrome



There were no Rash Syndrome outbreaks reported this week.

	Rash Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.22	1.69	1.77	0.99	1.39
Median Rate*	1.21	1.61	1.77	0.96	1.34

** Per 100,000 Residents*

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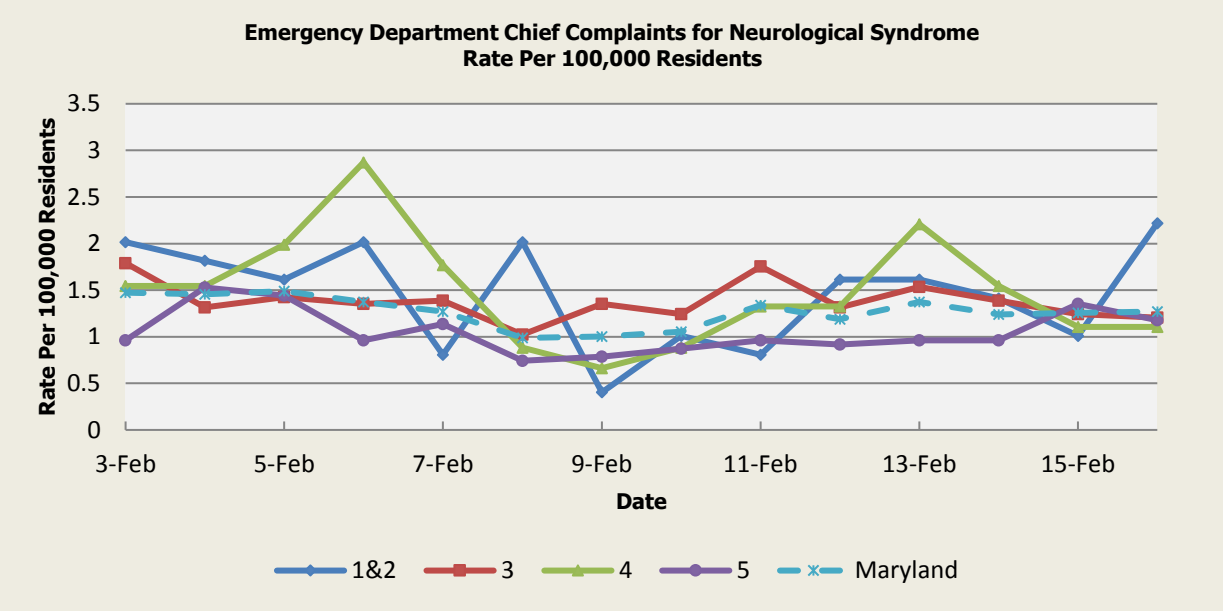
Neurological Syndrome



There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.75	0.91	0.83	0.58	0.76
Median Rate*	0.60	0.80	0.66	0.52	0.67

** Per 100,000 Residents*

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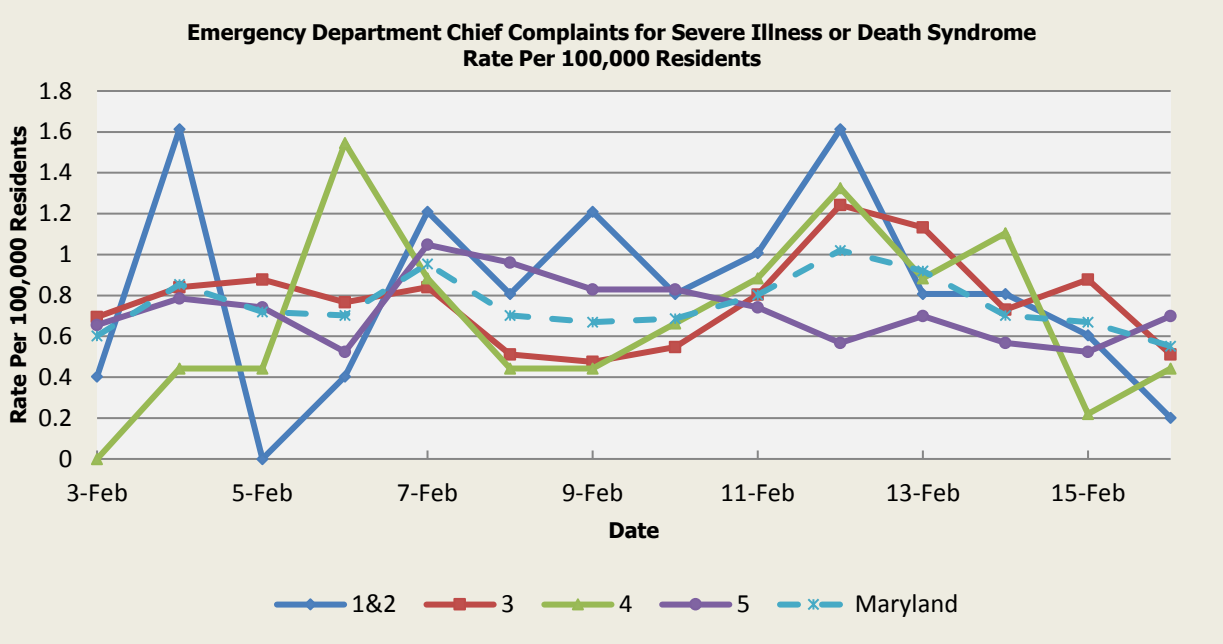
Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.66	0.90	0.83	0.50	0.72
Median Rate*	0.60	0.88	0.66	0.48	0.69

** Per 100,000 Residents*

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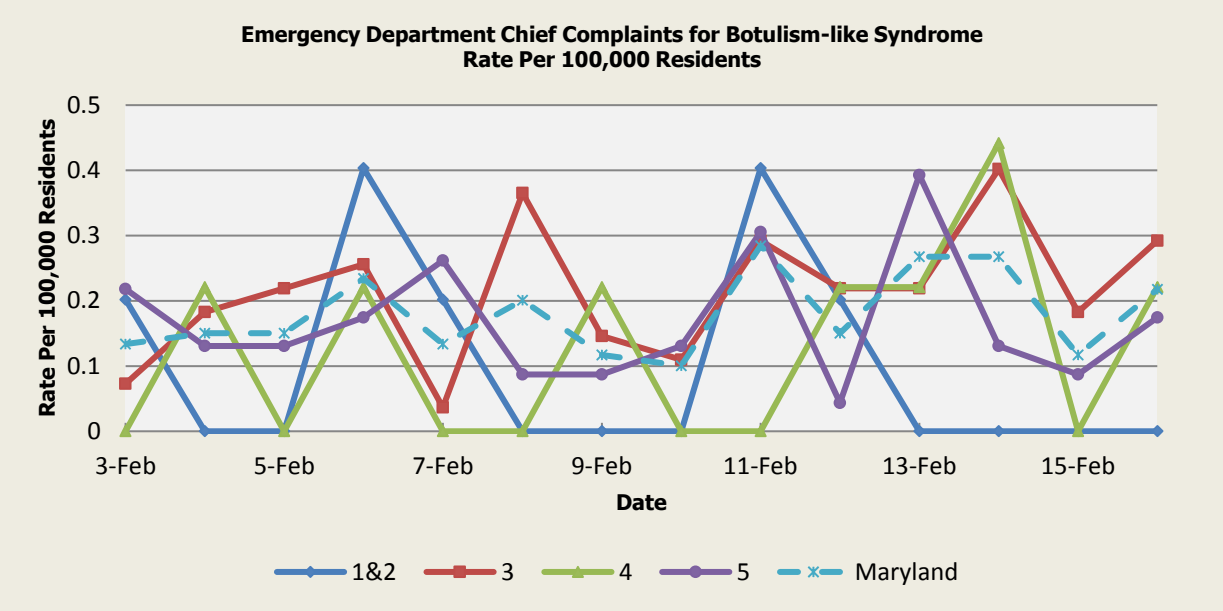
SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 2/3 (Regions 1&2,5), 2/4 (Region 4), 2/6 (Regions 1&2,3,4,5), 2/7 9Regions 1&2,5), 2/8 (Regions 1&2), 2/2 (Region 4), 2/11 (Regions 1&2,3,5), 2/12 (Regions 1&2,4), 2/13 (Regions 4,5), 2/14 (Regions 3,4), 2/16 (Regions 3,4,5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.07	0.11	0.05	0.07	0.09
Median Rate*	0.00	0.07	0.00	0.04	0.07

** Per 100,000 Residents*

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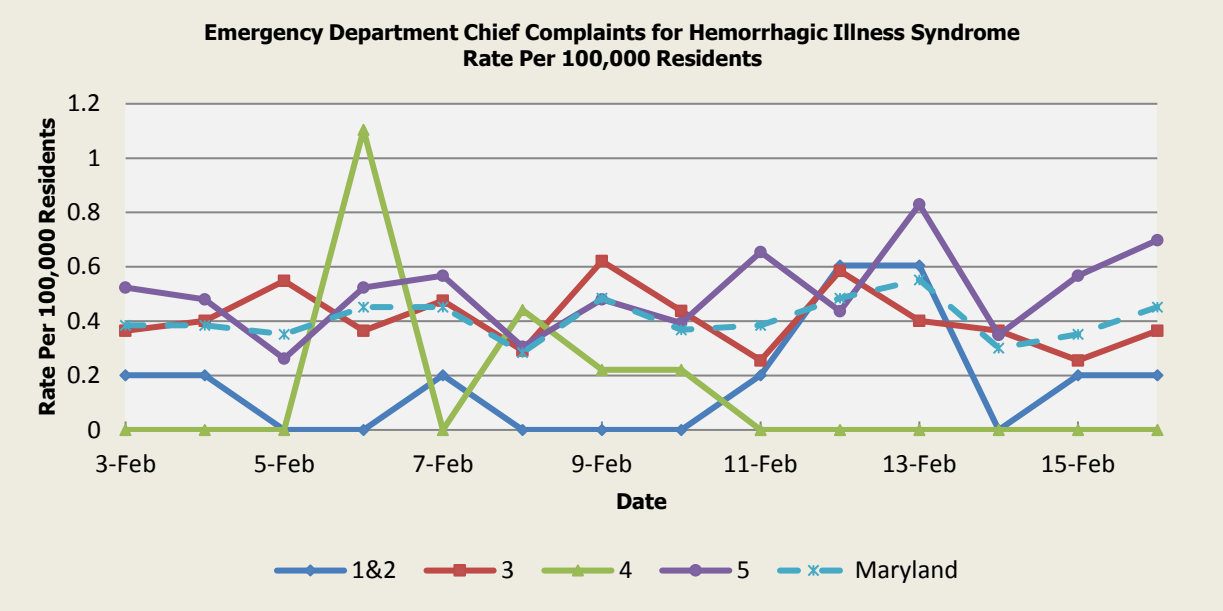
Hemorrhagic Illness Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 2/3 (Regions 1&2,3,5), 2/4 (Regions 1&2,3,5), 2/5 (Regions 3,5), 2/6 (Regions 3,4,5), 2/7 (Regions 1&2,3,5), 2/8 (Regions 4,5), 2/9 (Regions 3,4,5), 2/10 (Regions 3,4,5), 2/11 (Regions 1&2,5), 2/12 (Regions 1&2,3,5), 2/13 (Regions 1&2,3,5), 2/14 (Regions 3,5), 2/15 (Regions 1&2,5), 2/16 (Regions 1&2,3,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.04	0.15	0.04	0.12	0.12
Median Rate*	0.00	0.07	0.00	0.04	0.07

** Per 100,000 Residents*

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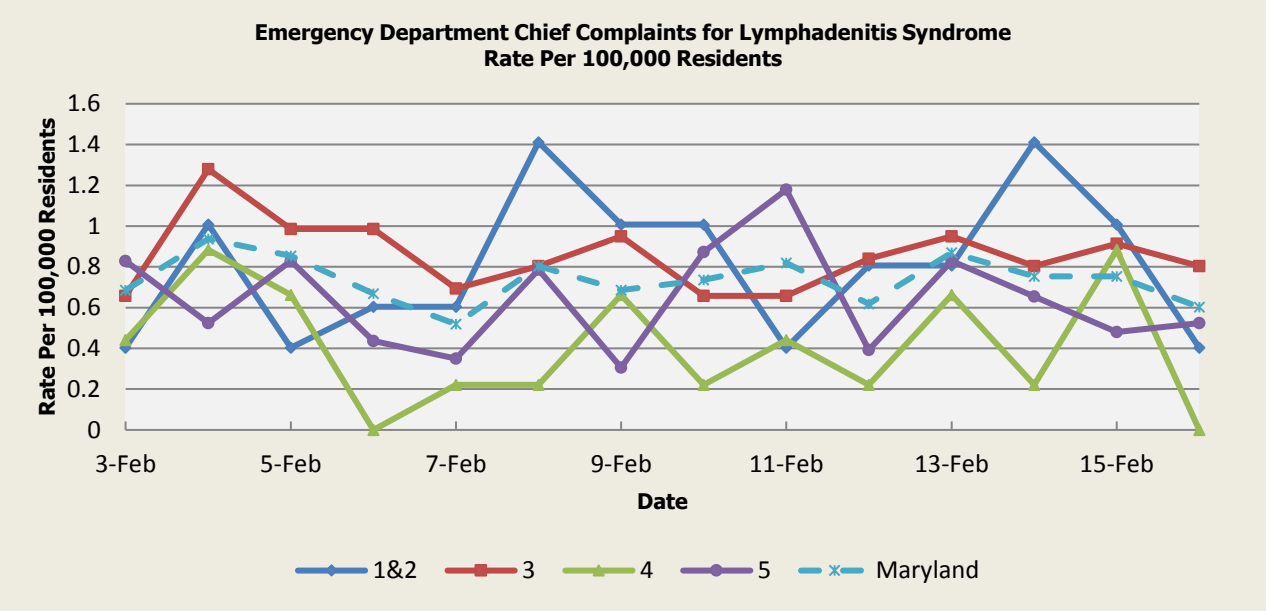
Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 2/3 (Region 5), 2/4 (Regions 1&2,3,4), 2/5 (Region 5), 2/8 (Regions 1&2,5), 2/9 (Regions 1&2), 2/10 (Regions 1&2,5), 2/11 (Region 5), 2/12 (Regions 1&2), 2/13 (Regions 1&2,5), 2/14 (Regions 1&2), 2/15 (Regions 1&2,4). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.35	0.57	0.39	0.36	0.46
Median Rate*	0.20	0.47	0.44	0.31	0.40

** Per 100,000 Residents*

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MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.

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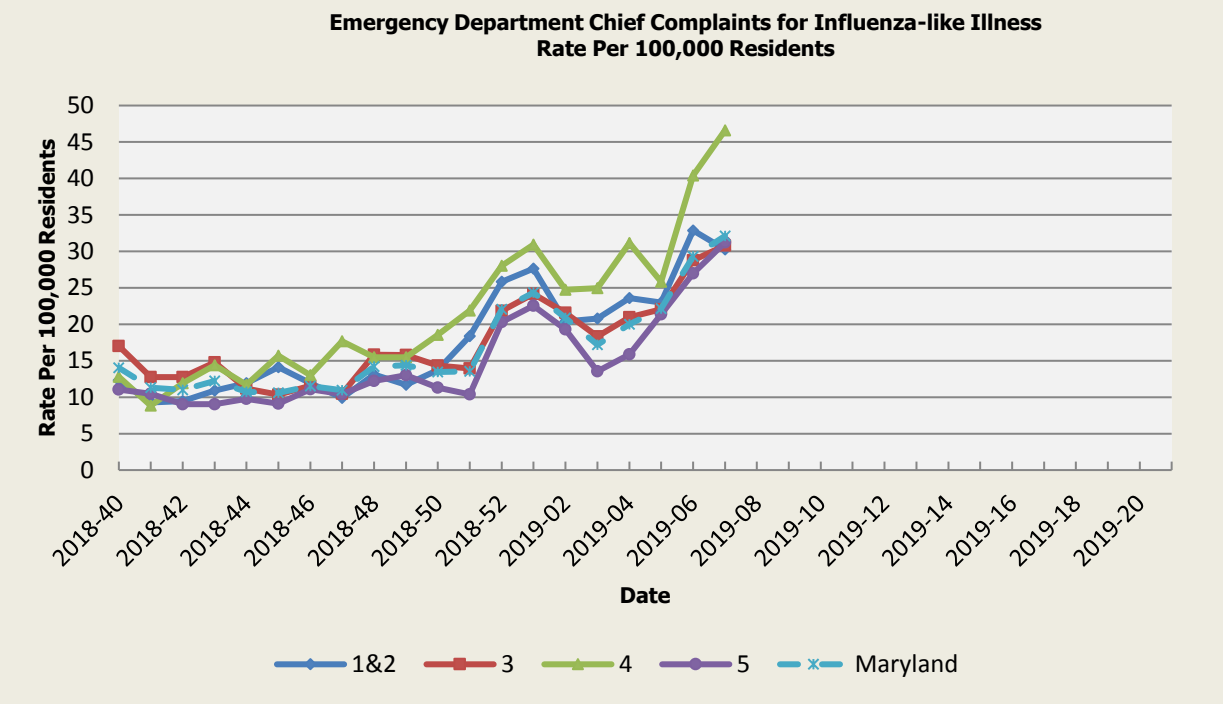
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019). Seasonal Influenza activity for Week 07 was: High Intensity.

Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.87	13.05	12.45	11.07	11.98
Median Rate*	7.66	10.16	9.05	8.58	9.15

** Per 100,000 Residents*

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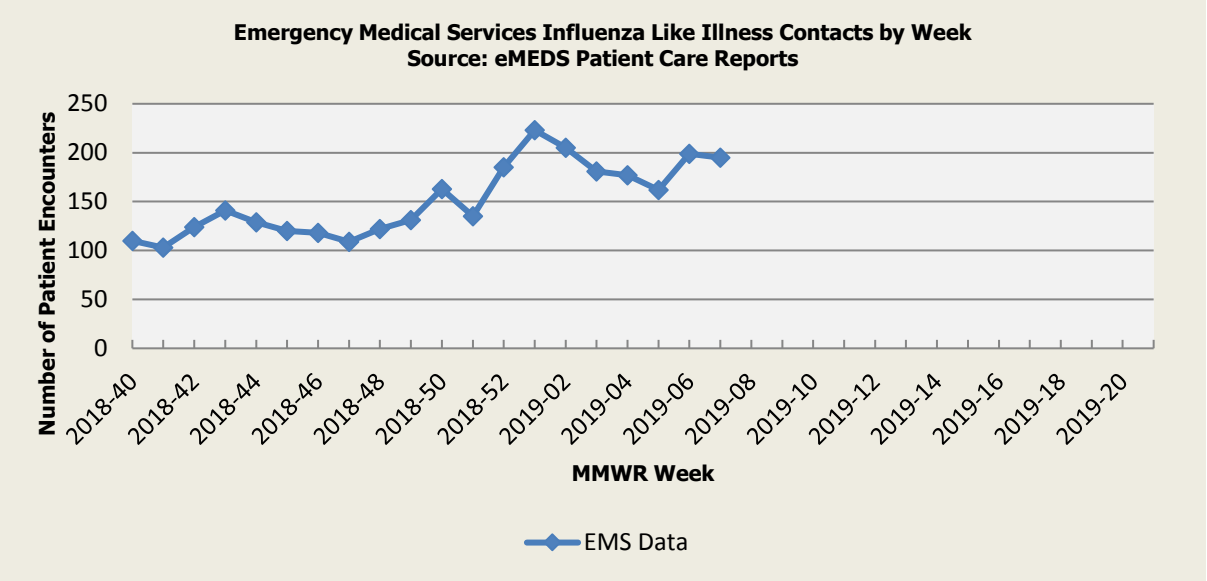
Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

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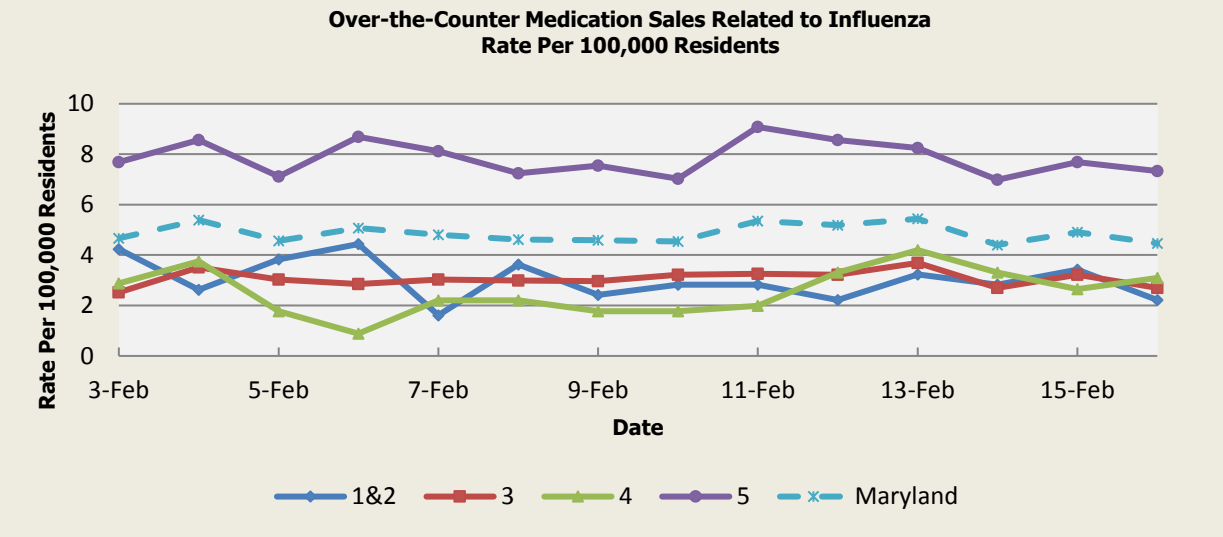
Over-the-Counter Influenza-Related Medication Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.61	4.66	2.74	8.09	5.75
Median Rate*	3.02	3.87	2.43	7.47	5.08

** Per 100,000 Residents*

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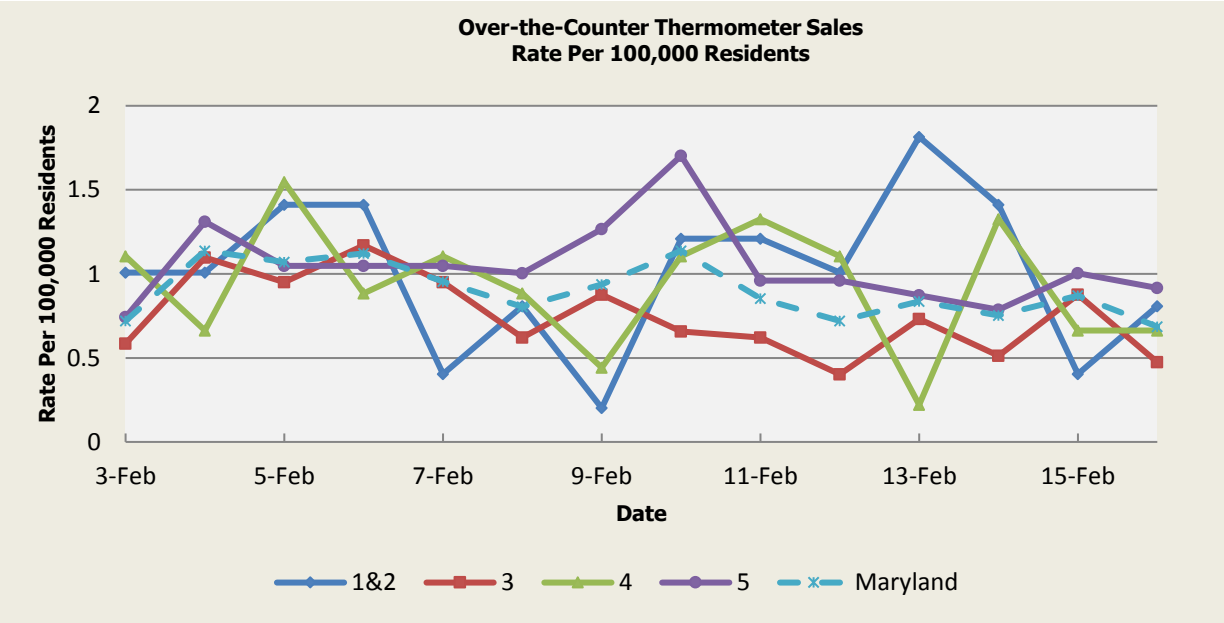
Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.10	2.96	2.34	3.93	3.30
Median Rate*	2.82	2.81	2.21	3.75	3.16

** Per 100,000 Residents*

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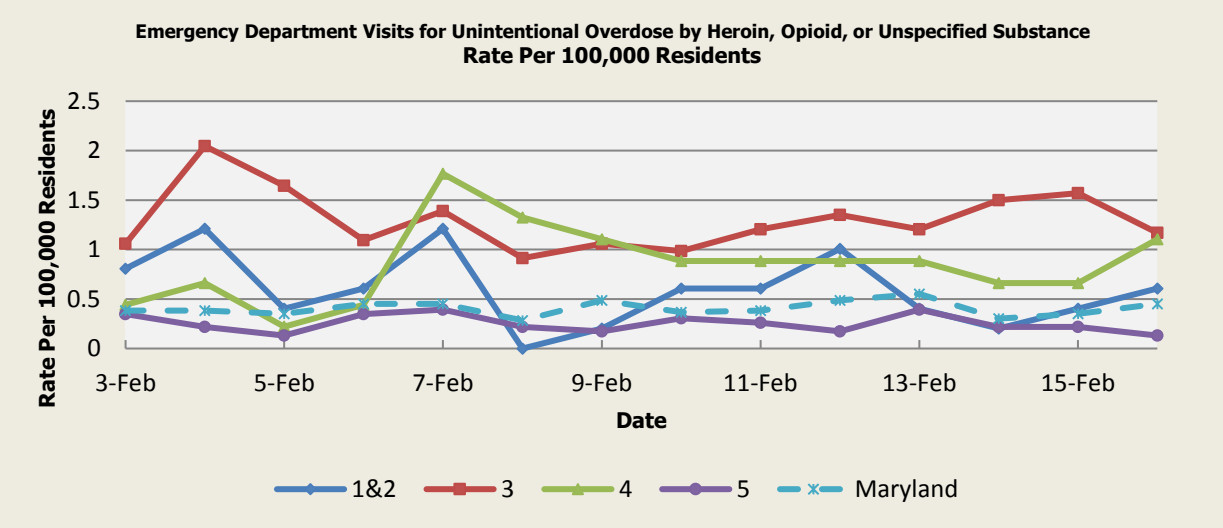
SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

Unintentional Overdose by Heroin, Opioid, or Unspecified Substance



Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

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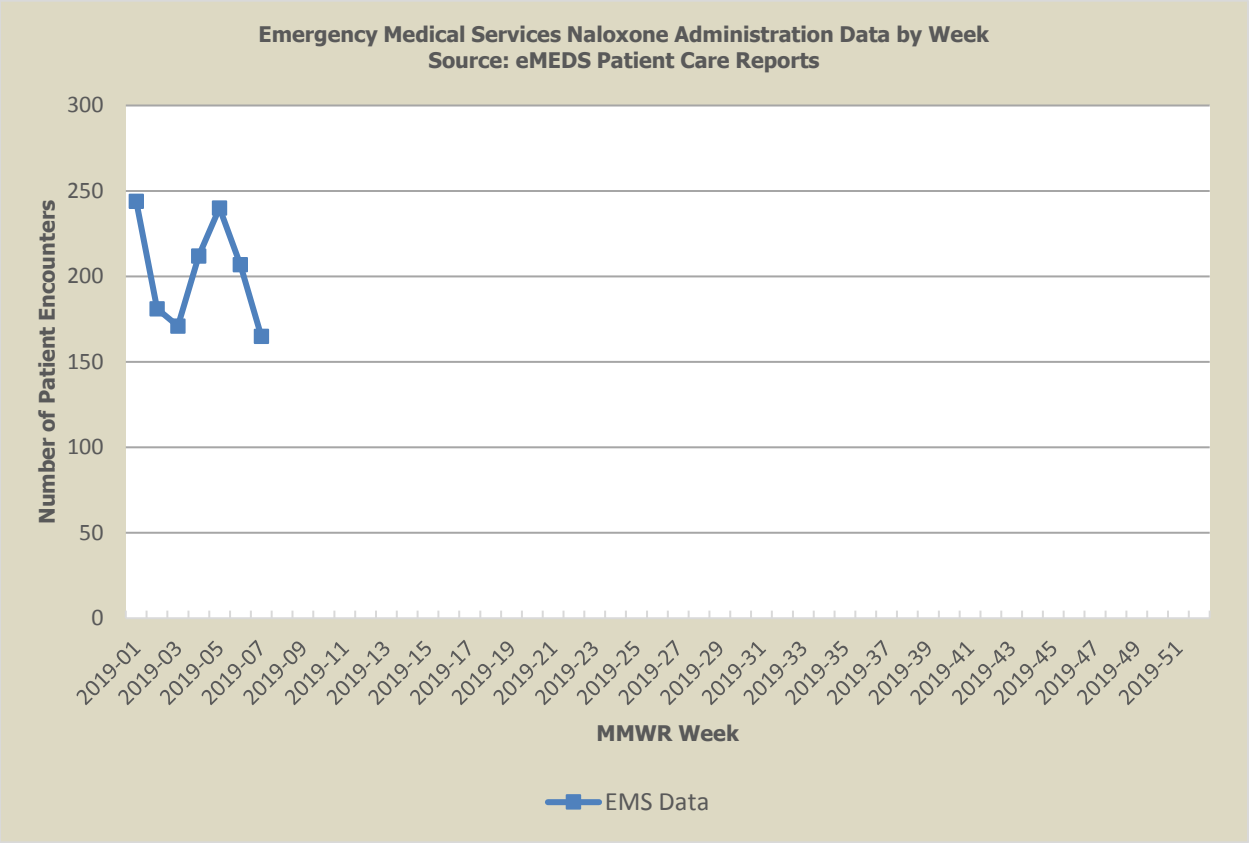
Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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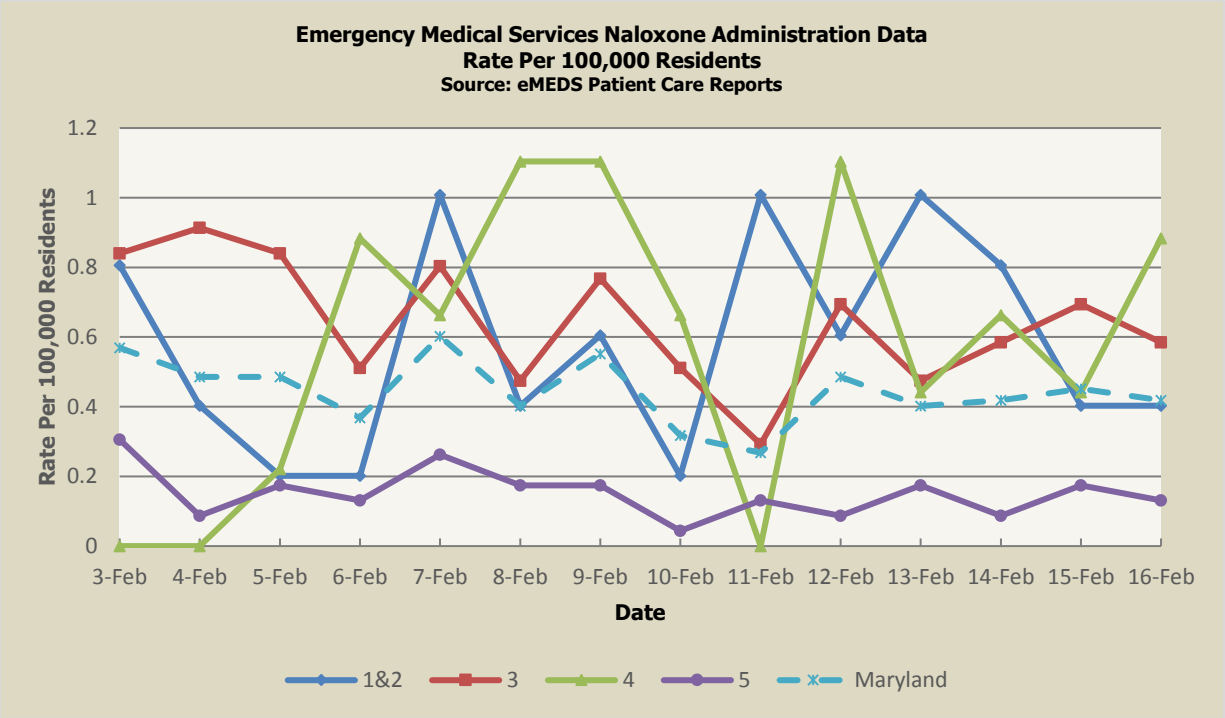
Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of February 21, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant avian influenza reports this week.

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week.

NATIONAL DISEASE REPORTS

FOODBORNE ILLNESS (IOWA), 20 Feb 2019, TV9 has learned the Johnson County Public Health Department and the Iowa Department of Public Health are investigating reports of food poisoning following an event in Swisher, Iowa. The illnesses have been linked to the Swisher Men's Club's Game Feast Dinner this past weekend [16-17 Feb 2019]. The group's Facebook page says the fundraiser has been going on for 15 years and features dishes that include meat from animals that are often hunted. The health departments are looking for anyone who may have attended the meal to try to track down the source of the illnesses. Read More: http://www.promedmail.org/post/6327405

LEGIONELLOSIS (MINNESOTA), 18 Feb 2019, A total of 4 people have been sickened in an outbreak Legionnaires' disease that has been linked to a hotel in northwestern Minnesota. The

individuals became ill between [22 Jan and 27 Jan 2019], with all having spent some time at the Crookston Inn and Convention Center prior to falling ill, though none of them stayed the night. Read More: http://www.promedmail.org/post/6323477

LEPTOSPIROSIS (HAWAII), 15 Feb 2019, A rare (and deadly) form of leptospirosis has infected 2 Oahu [Hawaii] men this year [2019]. Local doctors are alarmed after 2 men were diagnosed with a deadly form of leptospirosis known as Weil's disease. The bacteria attack the organs causing them to rapidly shut down. Doctor Scott Miscovich says the disease is almost unheard of. In his 30 year career he's only ever treated one case -- that is until last month [January 2019]. "To have 2 cases in a matter of 3 weeks walk into my office for something this rare was really exceptional," said Dr Miscovich. He says in its early stages symptoms of the disease can often mimic the flu, "You can get an upset stomach, you can throw up, you can get diarrhea, you can have muscle aches. 90 percent of the people will develop a fever." Read More: http://www.promedmail.org/post/6318622

INTERNATIONAL DISEASE REPORTS

CRIMEAN-CONGO HEMORRHAGIC FEVER (PAKISTAN), 20 Feb 2019, An elderly man died due to complications of the Crimean-Congo haemorrhagic fever (CCHF), commonly known as Congo virus, at the Jinnah Postgraduate Medical Centre (JPMC) on early [Sun 17 Feb 2019] morning, becoming the 2nd victim of the deadly tick-borne disease in the city [Karachi] in 2019. CCHF is a tick-borne viral disease, which is caused when a person comes in contact with an animal infected with the Congo virus due to the presence of the parasite on its skin. Mostly butchers, sheep and animal herders and those who are associated with cattle farming become victims of the CCHF, which has a 40 to 50% mortality rate. Read More: http://www.promedmail.org/post/6326061

BOTULISM (BRAZIL), 19 Feb 2019, A 5th patient affected by the bacterium _Clostridium botulinum_ toxin which causes botulism was transferred to the Intensive Care Unit (ICU) of the Regional Hospital of Cacoal in Rondônia. The woman was hospitalized at the Urgency and Emergency Hospital (Heuro) and, after worsening of the picture, the medical team also chose to transfer her to the ICU, where 4 other relatives have already been since Mon 11 Feb 2019. There are suspicions that they contracted the bacterial toxin during a barbecue last Sun 11 Feb 2019, after eating a mayonnaise prepared with green maize. All are residents of São Miguel do Guaporé. In addition to the 5 patients hospitalized in the ICU, another 3 people, 2 children and an adult also ate the mayonnaise, but did not present symptoms of botulism. Read More: http://www.promedmail.org/post/6322337

POLIOMYELITIS (AFGHANISTAN), 19 Feb 2019, One new polio case is just confirmed in southern Kandahar province, days after nationwide campaign against the crippling disease kicked off on [Mon 18 Feb 2019]. A 60-month-old boy from Ghorak district is infected by the poliovirus. This is the 2nd case reported in 2019, highlighting the ongoing risks of polio and the need for continued immunization, health officials said. Read More: http://www.promedmail.org/post/6324856

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County